

ZIV, D.M.; ISHINA, V.A.; ZIV, V.S.

Electrodeposition of bismuth from dilute solutions. Part 2:  
Deposition on carbon electrodes. Radiokhimiia 1 no.4:488-492  
'59. (MIRA 13:1)

(Bismuth)

HOVIKOVA, G.I.; VOLKOVA, Ye.A.; GOL'DIN, L.L.; ZIV, D.M.; TRET'YAKOV,  
Ye.I.

Radioactive decay of  $\text{Ac}^{227}$  and excited levels of  $\text{Fr}^{223}$  and  
 $\text{Th}^{227}$ . Zhur. eksp. i teor. fiz. 37 no. 4: 928-937 0 '59.  
(MIRA 13:5)

(Actinium--Isotopes) (Thorium--Isotopes)  
(Francium--Isotopes)

S/185/60/002/006/011/026  
AC51/A129

AUTHORS: Ishina, V. A., Ivanchenko, A.F., Ziv, D.M.

TITLE: A study on the electrochemical separation of bismuth from its diluted solutions. III. The effect of oxygen and acidity of the solution on the separation-dissolution potentials of bismuth.

PERIODICAL: Radiokhimiya, v. 2, no. 6, 1960, 691 - 698

TEXT: A comparative study was made on the separation-dissolution potentials ( $\varphi_{s/d}$ ) of bismuth in aerated and non-aerated solutions. The kinetics of the reaction was studied with the aid of the radioactive isotope ThC (Ref. 2: D. M. Ziv, V. A. Ishina, B. S. Ziv, Radiokhimiya, 1, 4, 488, 1959.) The method used for determining the potentials is similar to that described by D. M. Ziv, V. A. Ishina (Ref. 1: Radiokhimiya, 1, 2, 185, 1959). The values of  $\varphi_0$  (the formal standard potential) were calculated according to the "least squares" method for the area of the linear relationship of  $\varphi_{s/d}$  to  $\lg C$ , and  $n$  (the number of participating electrons in the reaction) was estimated in the same way. It was established that the lowest limit of applying the abbreviated

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S/186/60/002/006/011/026  
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A study on the electrochemical ...

form of the Nernst equation ( $C_{\text{limit}}$ ) for the non-aerated solutions shifts considerably toward the lower concentrations widely exceeding the limits of complete coverage of the electrode. The removal of air (oxygen) from the solution is equal in its action to a decrease in the area of the electrode (Ref. 2) which causes the shift of  $C_{\text{limit}}$  in the same direction. When the air is removed from the solution, the concentration of the surface oxygen compounds or the surface concentration of the firmly adsorbed atoms of oxygen on the cathode drops sharply and the formation of bismuth is hampered. The possibility of formation of "microelectrode" aggregates is increased which causes the shift of  $C_{\text{limit}}$  toward lower  $C$ . Oxygen participates in the electrode reaction forming bismuth oxides, the heats of formation of which are sufficiently high positive values (for  $\text{Bi}_2\text{O}_3$   $H = 137.8$  kcal, for  $\text{BiO}$   $H = 49.8$  kcal, etc). The Bi residue obtained in the electrolysis were analyzed for oxygen, in order to determine the nature of the electrode reactions of bismuth. The second electrode reaction which may take place in addition to the reaction of simple ion discharge using up three electrons, is given as:  $\text{BiO}^+ + e \rightleftharpoons \text{BiO}$  ( $\varphi_0 = 0.39$  v) (1). The effect of the acidity of the solution was studied on three concentrations of nitric acid (0.1, 1 and 3 n). The comparative analysis of the obtained data shows that there are only very slight differences in the electrochemical beha-

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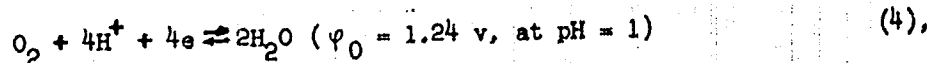
S/186/60/002/006/011/026  
A051/A129

A study on the electrochemical ...

behavior of bismuth in three concentrations of  $\text{HNO}_3$ . Certain features noted in the behavior of the  $\varphi_{s/d}$  versus  $\lg C_{\text{Bi}}$  curve are thought to be connected with the conditions of hydrolysis of bismuth in the given medium. The following ratio is accepted for the formation of the bismutyl ion according to the reaction



The oxygen ionization reaction taking place in the aerated solutions according to the equation:



would facilitate the formation of  $\text{BiO}^+$ ,  $\text{BiOH}^{2+}$  ions or other products of hydrolysis of bismuth. Experiments showed that the deviation of the value of the angle of decline of the line  $\varphi_{s/d}$  versus  $\lg C_{\text{Bi}}$  from the theoretical value for the reaction  $\text{Bi}^{3+} + 3\text{e} \rightleftharpoons \text{Bi}$  is determined by a side reaction forming bis-

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A study on the electrochemical ....

S/186/60/002/006/011/026  
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mith oxides:  $\text{BiO}^+ + e \rightleftharpoons \text{BiO}$ . There are 5 tables, 3 figures, and 8 references: 6 Soviet-bloc and 2 non-Soviet-bloc. The reference to the English language publication reads as follows: J. Van Muylder, M. Pourraux, Proc. 9th Meeting Intern. Comm. Electrochem. Therm. a Kinetics, 47, London, 1959.

SUBMITTED: January 18, 1960.

Card 4/4

ZIV, D.M.; VOLKOVA, Ye.A.

Extraction of  $RdTh$  from radium-mesothorium preparations.

Radiokhimiia 3 no.1768-74 '61.

(MIRA 14:3)

(Thorium--Isotopes)

(Radium--Isotopes)

VOLKOVA, Ye.A.; ZIV, D.M.

Making concentrated preparations of  $\text{MsTh}_2$  (Ac 228). Radiokhimia 3  
no.1:75-78 '61. (MIRA 14:3)

(Actinium--Isotopes)



21816

8/081/61/000/011/008/040  
B105/B203

55230

AUTHORS: Abramova, L. I., Ziv, D. M.

TITLE: Quantitative determination of small polonium amounts.  
Communication II. Sublimation in vacuum

PERIODICAL: Referativnyy zhurnal, Khimiya, no. 11, 1961, 48, abstract  
11E337 (Radiokhim. analiz produktov deleniya . M-L.,  
AN SSSR, 1960, 104-107)

TEXT: The authors developed a method of quantitative Po separation from powders of rock and artificial mixtures basing on sublimation in vacuo. The sublimation is conducted in a quartz apparatus consisting of a small ball with ground-in neck, into which pulverized rock is poured, and of a platinum disk 15 mm in diameter which is placed on the ground section and pressed on by means of a brass cylinder which simultaneously serves as water cooler for the disk. The whole system is pumped out during the experiment by an initial vacuum pump. The ball of the apparatus is placed in an electric furnace. At a temperature of 700-800°C and a vacuum of

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Quantitative determination of small ...

$10^{-2}$ - $10^{-3}$  mm Hg, the Po is sublimated during 3 hr and quantitatively precipitated on the platinum disk. The method was used for determining Po in magnetite of known uranium content. The results agreed with the theoretical value within the limits of experimental errors. The authors studied the dependence of Po sublimation on the time of "aging" of the preparation on platinum. It was shown that after 48-hr aging a heating of  $700^{\circ}\text{C}$  during 2.5 - 3 hr is required for the Po sublimation. Communication I, see RZh-Khim, 1961, 10B318 (10B318). [Abstracter's note: Complete translation.]

Card 2/2

23879  
S/186/61/003/001/012/020  
A051/A129

21.3400

AUTHORS: Ziv, D.M., Volkova, Ye.A.

TITLE: The formation of RdTh from radio-mesothorium samples

PERIODICAL: Radiokhimiya, v 3, no 1, 1961, 68-73

TEXT: The authors recommend a method for the formation of RdTh and RaD from radio-mesothorium samples, and the separation of RdTh from RaD based on the difference in the solubilities of radium, thorium and lead bromides in mixtures of water- 47% HBr, methyl alcohol- 47% HBr and methyl alcohol-ether at different ratios of the mixture components. The method ensures almost complete separation of RdTh and RaD from a Ra-MsTh sample and separation of these compounds without adding a carrier. The alcohol-ether method based on the precipitation of RaD with barium bromide is recommended for separating RdTh and RaD from a saturated solution of barium bromide in methyl alcohol using ether. The final yield of RdTh is 86% of the initial quantity. In the experimental procedure first the relationship of the degree of precipitation of barium bromide and radium bromide to the quantity of the added precipitant

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S/186/61/003/001/012/020  
A051/A129

The formation of RdTh ...

was investigated (Figs 1,2). The graphical results show the best conditions of precipitation for  $BaBr_2$  and  $RaBr_2$ . Further, the behavior of RdTh and RaD was studied, each one separately, at various ratios between the volumes of the precipitant and the saturated solution of  $BaBr_2$ . RdTh content was determined by the emanation method. The results obtained are analyzed and it is concluded that the precipitation of  $BaBr_2$  from its saturated water solution or solution in methyl alcohol by a 4-fold volume of 47% HBr results in the main quantities of RdTh, RaD and RaE (about 90%) remaining in the solution. The purification of RdTh from traces of Ra (MeTh.) and RaD can be conducted by adding drops of saturated alcohol ( $CH_3OH$ ) solution of  $BaBr_2$  (about 10 mg) to the alcohol-ether solution and subsequent separation of the residue. The purification of RaD from RdTh and barium traces is carried out by precipitating RaD in the form of a sulfide. Together with RaD the same amount of lead is separated as accumulated in the radio-mesothorium sample (RaG, ThD). There are 5 tables, 2 graphs and 11 references: 2 Soviet-bloc, 9 non-Soviet-bloc.

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23880

S/186/61/003/001/013/020  
A051/A129

21.3400

AUTHORS: Volkova, Ye.A., Ziv, D.M.

TITLE: The production of concentrated samples of  $\text{MsTh}_2(\text{Ac}^{228})$

PERIODICAL: Radiokhimiya, v 3, no 1, 1961, 75-78

TEXT: The authors recommend a fast and convenient method for  $\text{MsTh}_2$  formation from radio-mesothorium samples without adding a carrier based on the difference in the solubilities of actinium and barium bromides and barium-radio-mesothorium-1 in mixtures of methyl alcohol and ether. The authors mention their previous work (Ref 10) on the formation and experimental procedures used for this method. From the results of the previous experiments it is seen that 78-89%  $\text{MsTh}_2$  is extracted into the alcohol-ether solution. Ra- $\text{MsTh}$  bromide was used for the extraction of  $\text{MsTh}_2$  from which first  $\text{RdTh}$  had been removed, as well as  $\text{ThB}$ ,  $\text{RaD}$ ,  $\text{RaE}$ ,  $\text{Po}$ , etc. (Ref 10). Since the extracted  $\text{MsTh}_2$  decayed with a half-life of 6.5 hours instead of 6.15 hours caused by the presence of slight admixtures of long-lived radio-elements together with their products of decay ( $\text{Ra}$ ,  $\text{RaD}$ , etc.), an additional purification of  $\text{MsTh}_2$  Card 1/3

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The production of concentrated samples of  $\text{MsTh}_2$ ... S/186/61/003/001/013/020  
A051/A129

was undertaken by adding drops of a saturated solution of  $\text{BaBr}_2$  in methyl alcohol (about 10 mg of  $\text{BaBr}_2$ ) to the alcohol-ether solution of  $\text{MsTh}_2$  and subsequent separation of the precipitate. The decay curve of  $\text{MsTh}_2$  is shown in the graph. The half-life of  $\text{MsTh}_2$  is 6.2-6.3 hours. The yield of  $\text{MsTh}_2$  after purification is 70-80%. The production of it from radio-mesothorium<sup>2</sup> samples, including purification of  $\text{Ra-MsTh}_1$  traces and Pb isotopes, takes 20-30 minutes and can be carried out continuously over a period of 1-1.5 months, since the quantity of  $\text{RdTh}$  accumulated in this time is relatively small (1-1.5%), and does not pass into the alcohol-ether solution in noticeable quantities. After this time has passed the separation of the accumulated  $\text{RdTh}$  should be carried out according to the method described in Ref 10, and only after this  $\text{Ra-MsTh}$  may be used as a source of  $\text{MsTh}_2$ . There are 2 tables, 1 graph and 10 references: 1 Soviet-bloc, 9 non-Soviet-bloc.

Card 2/3

L 39090-66 EWT(m)/T/EWP(t)/ETI IJP(c) DS/JD/JG

ACC NR: AP6022878

SOURCE CODE: UR/0186/66/008/002/0197/0206

AUTHOR: Ziv, D. M.; Sukhodolov, G. M.; Fateyev, V. F.; Lastochkin, L. I. 39

ORG: none B

TITLE: Study of the electrochemical behavior of elements present in low and ultralow concentrations in solution. Part 1. Dependence of the deposition potential of lead on platinum and gold electrodes on the  $Pb^{2+}$  concentration in solution

SOURCE: Radiokhimiya, v. 8, no. 2, 1966, 197-206

TOPIC TAGS: electrodeposition, lead, platinum, gold, electrode potential

ABSTRACT: A review of the literature shows that the nature of the electrode material on which the electrodeposition of an element from ultradilute solutions takes place plays a major part in the electrodeposition process. In this connection, the effect of the electrode material on the electrodeposition of lead on gold and platinum electrodes in nitric acid solutions was studied by means of polarization curves of the second kind.  $ThB (Pb^{212})$  was used as the radioactive tracer for lead. The dependence of the critical deposition potential of lead,  $\phi_{cr}$ , on its content in the solution was studied over a wide range of lead concentrations ( $10^{-12}$  to  $10^{-2}$  g-ion/l). The curve expressing this dependence was found to have three regions: 1) region of constant  $\phi_{cr}$ , (2) intermediate region, and (3) region of linear dependence of  $\phi_{cr}$  on  $\log C$ ,

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UDC: 543.53:546.815

139090-66

ACC NR: AP6022878

1. e., the Nernst region. It was found that on platinum electrodes,  $\phi_{or}$  in the region of independent potentials is 0.110 V higher than on gold. The width of the intermediate region on platinum is two orders of magnitude smaller than on gold. In the Nernst region, the values of  $n$  (from the Nernst equation) were found to be 1.46 and 1.45 for platinum and gold electrodes respectively. Orig. art. has: 5 figures, 3 tables, and 3 formulas.

SUB CODE: 07/ SUEM DATE: 26Dec64/ ORIG REF: 006/ OTH REF: 009



L 39088-66 EWP(e)/EWT(m)/T/EWP(t)/ETI IJP(c) WH/DS/JD/WM  
SOURCE CODE: UR/0186/66/008/002/0206/0210

ACC NR: AP6022879

AUTHOR: Ziv, D. M.; Sukhodolov, G. M.; Fateyev, V. F.; Lastochkin, L. I.

ORG: none

TITLE: Study of the electrochemical behavior of elements present in low and ultralow concentrations in solution. Part 2. Deposition of lead on graphite electrodes /5

SOURCE: Radiokhimiya, v. 8, no. 2, 1966, 206-210

TOPIC TAGS: lead, graphite, electrode potential, electrodeposition

ABSTRACT: The paper continues a study of the dependence of the deposition potential of lead on its concentration in solution. The effect of the nature and concentration of the electrolyte on the value of the critical deposition potential  $\phi_{cr}$  of lead on graphite electrodes was investigated by means of the method of polarization curves of the second kind. A study of the effect of solution acidity (0.1 and 3 N HNO<sub>3</sub>) on  $\phi_{cr}$  in the 10<sup>-13</sup>-10<sup>-1</sup> g-ion/l range of lead concentrations showed that the HNO<sub>3</sub> concentration has a substantial influence on the course of the dependence of  $\phi_{cr}$  on log C<sub>Pb2+</sub> in the range of ultralow lead concentrations (from 10<sup>-13</sup> to 10<sup>-7</sup> g-ion/l. This influence is insignificant at lead concentrations above 10<sup>-6</sup> g-ion/l. A study of the dependence of  $\phi_{cr}$  on log C<sub>Pb</sub> in 1 N perchloric and nitric acid solutions showed that the nature of these acids has no appreciable influence on this dependence. Values of

UDC: 543.53:546.815

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L 39088-66

ACC NR: AP6022879

the critical electrodeposition potentials of lead on graphite electrodes, obtained by methods of polarized curves of the first and second kind, were compared and found to agree satisfactorily. Orig. art. has: 4 figures and 5 tables.

SUB CODE: 07/ SUBM DATE: 26Dec64/ ORIG REF: 006

Card

2/2 MCLP

ZIV, D.M.; SHESTAKOVA, I.A.

Solubility of some actinium compounds. Part 1: Determination of the solubility of actinium oxalate. Radiokhimiya no.2: 166-175 '65.

Solubility of some actinium compounds. Part 2: Determination of solubility and evaluation of the relative basicity of actinium hydroxide. Ibid.:175-187 (MIRA 18:6)

KAIPOV, R.L.; ZIV, D.M.; LEYPUNSKAYA, D.I.; SAVOSIN, S.I.; FEDOROV, V.V.;  
FRADKIN, G.M.; SHIMELEVICH, Yu.S.; BASIN, Ya.M.; KUKHARENKO, N.K.;  
SHESTAKOV, B.I.

Use of Ac - Be neutron sources in industrial geophysics. Atom energ.  
16 no.3:269-270 Mr '64. (MIRA 17:3)

ZIV, D.M.; KIRIN, I.S.; IVANCHENKO, A.F.; ISHINA, V.A.

Enrichment of radioactive preparations of antimony based on  
phthalocyanine complexes. Radiokhimiia 5 no.5:632-633 '63.

(MIRA 17:3)

ISHINA, V.A.; ZIV, V.S.; IVANCHENKO, A.F.; ZIV, D.M.

Study of the electrochemical behavior of antimony in micro- and ultramicroamounts. Radiokhimiia 5 no.5:629-631 '63, (MIRA 17:3)

ZIV, M.A. (Leningrad, Liteynyy pr., d. 34, kv. 18.)

Endometriosis of the rectum [with summary in English]. Vop. onk.  
3 no.1:105-108 '57 (MLRA 10:4)

1. Iz I khirurgicheskoy kliniki (zav.-prof. S.A. Kholdin) Instituta  
onkologii AMN SSSR (dir.-ohl.-korr. AMN SSSR prof. A.I. Serebrov)  
(ENDOMETRIOSIS, case reports  
rectum)  
(RECTUM, dis.  
endometriosis)

ZIV, M.A. (Leningrad, Liteyny pr., d.34, kv.18); PAVLOV, K.A. (Leningrad, ul. Voinova, d.64, kv.15); VOL'FSON, H.I. (Leningrad, ul. Dzerzhinskogo, d.25, kv.3)

Effects of ouain on skin cancer and the precancerous state [with summary in English]. Vop.onk. 3 no.2:221-226 '57. (MIRA 10:6)

1. Iz laboratorii eksperimental'noy onkologii (sav. - chlen-korr. Akademii meditsinskikh nauk SSSR prof. L.M.Shabad) i nauchno-poliklinicheskogo otdela (sav. - a.s. nauchnyy sotr. K.A.Favlov) Instituta onkologii Akademii meditsinskikh nauk SSSR (dir. - chlen-korrespondent Akademii meditsinskikh nauk SSSR prof. A.I.Serebrov).

(SKIN NEOPLASMS, ther.

deacetyl-N-methylcolchicine in cancer & precancerous state (Rus))

(COLCHICINE, related compds.

deacetyl-N-methylcolchicine, ther. of skin cancer & precancerous state (Rus))



214, M. A.

EXCERPTA MEDICA Sec.16 Vol.6/4 Cancer

April 58

1343. *An assessment of patients with lung cancer treated at the Oncological Institute AMS USSR (Russian text)* Ziv M. A. and Pavlov K. A. *Vestn. Khir.* 1957, 79/9 (29-32 and 156) Graphs 2

The case histories of 1,883 outpatients supposed to have lung cancer are discussed. In 818 cases the diagnosis proved to be correct (45%). The protracted course of the examinations in the outpatient centres, with many time-consuming roentgen controls of patients with so-called chronic pneumonia led to a delayed diagnosis and reduced operability. Every non-resolved and, especially, recurrent so-called non-specific pneumonia in patients over 40 yr. of age is suspect. These patients must be listed apart, and hospitalization in special clinics must follow without delay.

LARIONOV, L.F.; ZIV, H.A.

Late results of chemotherapy in lymphogranulomatosis. Vop.  
onk. 4 no.2:161-166 '58. (NIRA 12:8)

1. Iz Instituta onkologii AMN SSSR (dir. - deystvitel'nyy chlen  
AMN SSSR prof.A.I.Serebrov). Adres avtorov: Moskva, 3-ya  
Meshchanskaya ul., d.61/2, korp.9, Institut eksperimental'noy  
patologii i terapii raka.

(NITROGEN MUSTARDS, ther. use

N-bis (2-chloroethyl)-2-chloropropylamine in  
Hodgkin's dis., late results (Rus))

(HODGKIN'S DISEASE, ther.

N-bis (2-chloroethyl)-2-chloropropylamine,  
late results (Rus))

ZIV, M.A. (Leningrad, Litaynyy pr., d.34, kv.18)

Bronchogenic cyst of the posterior mediastinum. Vest.khir. 82  
no.1:131-132 Ja '59. (MIRA 12:2)

1. Iz khirurgicheskogo otdeleniya (sav. - prof. S.A. Kholdin)  
Instituta onkologii AMN SSSR.  
(MEDIASTINUM, cysts  
bronchogenic of posterior mediastinum (Rus))

ZIV, M.A.; PAVLOV, K.A.

Use of some chemotherapeutic preparations in treating malignant tumors and systemic diseases. Trudy Inst. onk. AMN SSSR no.3:158-168 '60 (MIRA 16:12)

1. Iz poliklinicheskogo otdela (zav - starshiy nauchnyy sotrudnik K.A.Pavlov) Instituta onkologii AMN SSSR.

DYMARSKIY, L.Yu.; DIL'MAN, V.M.; ZALESSKAYA, L.I.; ZIV, M.A.; BOGIBOV,  
Ye.A.; PAVLOVA, M.V.

Combined hormone and chemotherapy and radiotherapy of far  
advanced breast cancer. Vop. onk. 9 no.7:44-52 '63.

(MIRA 16:12)

1. Iz Instituta onkologii AMN SSSR (nauchnyy rukovoditel' raboty  
chlen-korrespondent AMN SSSR prof. S.A. Kholdin). Adres avtorov:  
Leningrad, P-129, Institut onkologii AMN SSSR.

ZIV, M.A.; PAVLOV, K.A. (Leningrad, pr.Engel'sa, d.28,kv.75)

Chronic pneumonias and bronchial cancer. Vest.khir. 89 no.9:  
20-24 S '62. (MIRA 15:12)

1. Iz nauchno-poliklinicheskogo otdela (zav. - starshiy nauchnyy  
sotrudnik K.A.Pavlov) Instituta onkologii AMN SSSR (dir. - prof.  
A.I.Serebrov).

(PNEUMONIA) (BRONCHI--CANCER)

ZIV, M. A.; PAVLOV, K. A.

Experience with the use of some chemo-therapeutic preparations in the treatment of malignant neoplasms and systemic diseases. Vop. klin. lech. zlok. novobraz. 7:105-112. '61.

1. Institut onkologii AMN SSSR (dir. — deystv. chl. AMN SSSR prof. A. I. Serebrov).

(ANTINEOPLASTIC AGENTS ther)

ZIV, D.M.; ZIV, V.S.; SINITSYNA, G.S.

Use of the electrochemical method for determining the solubility  
of polonium hydroxide. Trudy Radiev.inst.AN SSSR. 8:158-162  
'58. (MIRA 12:2)

(Polonium hydroxide) (Electrochemistry)



ISHINA, V.A.; ZIV, V.S.; IVANCHENKO, A.F.; ZIV, D.M.

Study of the electrochemical behavior of antimony in micro- and ultramicroamounts. Radiokhimiia 5 no.5:629-631 '63. (MIRA 17:3)

ZIV, D.M.; ISHINA, V.A.; ZIV, V.S.

Electrodeposition of bismuth from dilute solutions. Part 2:  
Deposition on carbon electrodes. Radiokhimiia 1 no.4:488-492  
'59. (MIRA 13:1)

(Bismuth)

ZIV, Veniamin Samuilovich

Principles of world economics. Riga, NITI, 1930. 91 p.

1. Economic policy

Ziv, Ye. F.

Scheelite in "skarns" of eastern Kazakhstan, Ala-Tau, Siberia, approx. 54° N., 80° E. H. F. Ziv and V. D. Timofeev. Bull. Acad. Sci. U. R. S. S., Class. sci. math. nat., Ser. geol. 1934, 600-611; Mineralog. Abstracts 7, 48.—The order of consolidation of the igneous rocks here has been gabbro, diorite, granodiorite followed by pegmatite and apatite veins; contact metamorphism with surrounding sediments gave marble and hornfels. This in the pneumatolytic and hydrothermal stages was followed by further metamorphism producing "skarn" rocks in which different places pyroxene, garnet, magnetite, calcite, quartz, epidote, serpentine, diopside, scapolite, wollastonite or amphibole predominate. Scheelite is usually associated with garnet- and pyroxene-garnet-skarns. Several analyses are given.

C. A. Silbrat

COMMON ELEMENTS

OPEN MATERIALS

ASSOCIATED METALLURGICAL LITERATURE CLASSIFICATION

COMMON ELEMENTS										OPEN MATERIALS																																																																																									
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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

ZIV Ye F.

Scheelite in skarns of the eastern slope of the Kurantsk  
Ala-Tau. R. F. Ziv, Trans. All-Union Sci. Research  
Inst. Engng. Metallurgy (U. S. S. R.) No. 145, 4 (1960)  
English, 189-61(1960). - See C. A. 32, 4100d.  
D. W. Pearce

ASS-SLA METALLURGICAL LITERATURE CLASSIFICATION

0000000000

ZIV, Ye.F.; VAYSENBERG, A.I.; STEPANOV, I.S., nauchnyy red.; YEREMOV, A.D., glavnyy red.; GINZBURG, A.I., red.; ZVEREV, L.V., red.; KRUYTER, V.M., red.; MOKROUSOV, V.A., red.; SOLOV'YEV, D.V., red.; KHRUSHCHOV, N.A., red.; CHERNOSVITOV, Yu.L., red.; SHMANENKOV, I.V., red.; NEKRASOVA, N.B., red.izd-va; IVANOVA, A.G., tekhn.red.

[Industry's requirements as to the quality of mineral raw material; handbook for geologists] Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol. i okhrane nedr. No.49. [Niobium and tantalum] Niobii i tantal. izd.2., perer. 1959. 49 p. (MIRA 12:12)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya. (Niobium) (Tantalum)

SAMSONOV, Grigoriy Valentinovich; KONSTANTINOV, Vladimir Ivanovich.  
Prinimali uchastiye: ZIL, Ye. P.; KOSOLAPOVA, T. Ya. NIKOLAYEV,  
N.S., doktor khim.nauk, setsenzent; VAYSENBERG, A.I., kand.tekhn.  
nauk, retsenzent, red.; KOLCHIN, O.P., kand.tekhn.nauk, retsenzent,  
red.; ARKHANGEL'SKAYA, M.S., red.isd-va; VAYNSHTEYN, Ye.B., tekhn.  
red.

[Tantalum and niobium] Tantal i niobil. Moskva, Gos.nauchno-tekhn.  
izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1959. 264 p.

(MIRA 12:11)

(Tantalum)

(Niobium)

BORODINA, M.L.; ZIV, Ye.F.; SHAYKEVICH, S.B.; GUBAREVA, N.A.

Use of ilmenite concentrates for the production of pigmented  
titanium dioxide by the sulfuric acid method. Titan i ego  
splavy no.5:282-288 '61. (MIRA 15:2)

(Ilmenite)  
(Titanium oxide)



S/137/62/000/006/030/163  
A006/A101

AUTHORS: Borodina, M. L., Ziv, Ye. F., Shaykevich, S. B., Gubareva, N. A.

TITLE: Utilization of ilmenite concentrates for the production of pigmentary titanium dioxide with the aid of the sulfuric acid method

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 6, 1962, 13, abstract 6096  
(In collection: "Titan i yego splavy", no. 5, Moscow, AN SSSR, 1961, 282 - 288)

TEXT: It was established that with greater intensity of utilizing the ilmenite concentrate, the degree of Ti extraction decreases from 94 to 76%. Best results regarding the requirements of pigmentary  $TiO_2$  production by the sulfuric acid method, are obtained with a concentrate of the following composition:  $TiO_2$  49 - 53%;  $FeO$  20 - 31%;  $Fe_2O_3$  14 - 22%; the amount of rutilized ilmenite is 0.3 - 1.78%. Pigmentary  $TiO_2$ , obtained from this concentrate, is distinguished by a high degree of whiteness and dispersity, and is characterized by the least Cr and V admixtures.

[Abstracter's note: Complete translation]

L. Vorob'yeva

Card 1/1

MALCIC, Stjepan S.; ZIVADINOVIC, Milutin S.

X-ray investigation of iodolaurionite. Bul Inst Nucl 10:47-50 Mr '60.  
(EEAI 10:5)

1. Institute of Nuclear Sciences "Boris Kidrich" Laboratory of  
Physical Chemistry.  
(Iodolaurionite) (X rays)

**ZIVADINOVIC, Jelena**

Succession of mixed populations of Collembola in the dolomite complex near Konjic. God Biol inst Sar 15 no.1/2:147-150 '62

1. Bioloski institut Univerziteta, Sarajevo.

ZIVADINOVIC, Milutin, dipl. fiz.hem. (Beograd, Ljube Stojanovica 38/3)

Neutron diffractometer at Vinca. Tehnika Jug 18 no.7:Supplement:  
Radioizotopi zrac 2 no.7:1219-1221 JI'63.

1. Institut za nuklearne nauke "Boris Kidric", Beograd-Vinca.

10

CO

Amphoteric nature of organic oxygen compounds. N. A. Pushin and R. Izvestiye. *Bull. soc. chim. roy. Yougo-Slav.* 4, 33-30 (1951).—The fusion diagrams of the systems  $\text{NH}_4\text{Ph-piperonal}$  and  $p\text{-C}_6\text{H}_4\text{NH}_2\text{-camphor}$  do not give evidence of compd. formation;  $p\text{-MeC}_6\text{H}_4\text{NH}_2$  forms a compd. with 1 mol. of  $\alpha\text{-C}_6\text{H}_4(\text{CO})_2$ , m.  $195^\circ$ , and with 2 mols. of coumarin, m.  $42^\circ$ . B. C. A.

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION

EDITION 1951

EDITION 1951

EDITION 1951

**Amphoteric nature of organic oxygen compounds.** N. A. FOMIN and R. ZIVADKOV (Bull. Soc. Chim. Yougoslav., 1934, 6, 23-30).—The fusion diagrams of the systems  $\text{NiCl}_2\text{H}_2\text{O}$ -picorial and  $\text{p-C}_6\text{H}_4\text{N}_2\text{H}_2\text{O}$ -picorial do not give evidence of compound formation.  $\text{p-C}_6\text{H}_4\text{N}_2\text{H}_2\text{O}$  forms a compound with 1 mol. of  $\text{p-C}_6\text{H}_4\text{N}_2\text{H}_2\text{O}$ , m.p. 193°, and with 2 mols. of oxamic acid, m.p. 48°. R. T.

**R. I.**

Reaction of phosgene with hexamethylenetetrazine.  
 N. A. Pashin and R. D. Zavadzinskii. *Bull. soc. chim. ury.*  
*Yevpasia*, 6, 165-6 (1938). A white amorphous compd.  
 $\text{COCl}_2 \cdot \text{C}_6\text{H}_{12}\text{N}_4$ , m. 187-90° with decolour., is formed by  
 the action of  $\text{COCl}_2$  on  $\text{C}_6\text{H}_{12}\text{N}_4$  in  $\text{CHCl}_3$  soln.; it is sol.  
 in  $\text{H}_2\text{O}$ , insol. in most org. solvents. J. G. Tolpin

ASB-11A METALLURGICAL LITERATURE CLASSIFICATION

1938-1940

1941-1945

1946-1950

1951-1955

1956-1960

1961-1965

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JC355-25



RADIOBIOLOGY

YUGOSLAVIA

KILIBARDA, M.; MARKOVIC, B.; ZIVANCEVIC, S. and PANOV, D.; Institute of Occupational Medicine of the Socialist Republic of Serbia (Institut za medicinu rada SRS,) Belgrade.

"Osmotic Resistance of Leukocytes Following Fractionated X-Irradiation of Rats."

Zagreb, Arhiv za Higijenu Rada i Toksikologiju, Vol 16, No 4, 1965; pp 353-356.

Abstract [English summary modified]: Whole-body irradiation in rats exposed to X-rays 1 r per min, 3 mA 70 kV for 20 minutes weekly for 20 weeks was followed by a progressive fall in osmotic resistance and longevity of white blood cells. Table, graph, 2 Soviet and 7 Western references; ms received 21 Jan 65.

ZIVANIVIC, Svetolik (Eng.)

"The variant of the normal guage railway line Sarajevo - Mostar - Luka Flice"

SO: ZELEZNICE No. 6, Year XI, June 1955

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Characteristics of the composition of an adsorptive complex  
of a series of soils developed on Triassic limestone. Zemljista  
biljka 12 no.1/3:95-102 Ja-D '63.

1. Agricultural Faculty of the University of Sarajevo, Sarajevo.

RISTIC, M. M.; RADIC, S.; ZIVANOVIC, B.

Characteristic parameters of sintering as measures of the effect of compacting pressure on the sintering of uranium dioxide. Bul Inst Nucl 14 no. 4: 199-208 O '63.

1. Department of Reactor Materials, Boris Kidric Institute of Nuclear Sciences, Beograd-Vinca.

ZIVANOVIC, B.; RISTIC, M.M.

Balance of energy at high-temperature torsion of sintered  $UO_2$ .  
Bul Inst.Nucl 13 no.3:31-39 0 '62.

1. Department of Reactor Materials.

ZIVANOVIC, D.

The application of photometry in the metal industry. p. 1321  
(Tehnika, Vol. 11, no. 10, 1956. Beograd, Yugoslavia)

SO: Monthly List of East European Accessions. (ERAL) LC. Vol. 6, No. 7,  
July 1957. Uncl.

ZIVANOVIC, Dusan (Gradac kod Pljevalja)

Results of the biogeochemical prospections for lead in the region of Suplje Stijene, for iron and aluminum in the region of the Arandelovac basin, and for fireproof clays, iron and manganese in Slovenia. Geol vjes Hrv 14:379-380 '60 (publ.'61).

1. Rudnik olova i cinka "Suplja Stijena", Gradac kod Pljevalja, Crna Gora.

ZIVANOVIC, Dusan M.

Contribution to the knowledge of the effect of sound and ultrasound  
on *Paramecium caudatum*, *Stylonychia pustulata*, and *Spirostomum teres*.  
Glas Prir muz B 14:45-66 '59.



ZIVANOVIC, Miodrag, D.

SOURCE (in caps); Given Names

Country: Yugoslavia

Academic Degrees: not given

Affiliation: Department of Reactor Physics, Institute of Nuclear Sciences  
"Boris Kidrich"

Source: Belgrade-Vintcha, Bulletin of the Institute of Nuclear Sciences  
"Boris Kidrich", Vol 11, Mar 1961, pp 59-65.

Data: "Double-Crystal Neutron Spectrometer."

Co-authors:

JOVIC, Djordje, M., Department of Reactor Physics, Institute of  
Nuclear Sciences "Boris Kidrich",

KONSTANTINOVIC, Jovan, M., Department of Reactor Physics, Institute  
Nuclear Sciences "Boris Kidrich".

ZIVANOVIC, Miodrag D.; JOVIC, Dorde M.; KONSTANTINOVIC, Jovan M.

The neutron two-crystal spectrometer. Bul Inst Miel 11:59-65  
'61.

1. Institute of Nuclear Sciences "Boris Kidrich," Department of  
Reactor Physics, Vinca.

ZIVANOVIC, Miroslav

Stratigraphy of the Central Bosnian slate mountains. Geol glas  
BH 7:195-198 '63.

MLADENOVIC, Dragomir, Dr.; ZIVAKOVIC, Nata, Dr.

Two cases of uterine tamponade in partial placenta praevia. Med. glasn. 9 no.6:238-240 June '55.

1. Ginekološko-akuserska klinika Medicinskog fakulteta u Beogradu (upravnik prof. dr Tasovac) Ginekološko-akusersko odeljenje Bolnice u Sapcu (upravnik dr Novakovic).  
(PLACENTA PRAEVIA,  
partial, with uterus tamponade)

ZIVANOVIC, Olivera, sanitetski major dr; STOJADINOVIC, Nada, vojni sluzbenik  
V kl. san. sluzbe dr; MILIC, Mirjana, tehnicki saradnik laborant;  
AKSENTIJEVIC, Vida, tehnicki saradnik laborant

Results of studies on Staphylococcus pyogenes found in the infectious  
section of the ward for the burned. (Plastic Surgery Clinic of the  
Military Medical Academy. Vojnosanit. pregl. 19 no.6:423-432 Je '62.

1. Vojnomedicinska akademija u Beogradu, higijenski zavod -- Mikrobioloski  
institut.

(BURNS)

(CROSS INFECTION)

(STAPHYLOCOCCAL INFECTIONS)

S

ZIVANOVIC, Olivera, sanitetski kapetan I klase, dr.

Contribution to the study on pathogenic properties of *Staphylococcus albus* isolated from surgical material and hands of the personnel in a surgical ward. Voj.san.pregl. 18 no.3:281-284 Mr '61.

1. Vojnomedicinska akademija u Beogradu, Higijenski zavod - Mikrobioloski institut.

(STAPHYLOCOCCUS) (SURGERY OPERATIVE)

ZIVANOVIC, Olivera, sanitetski kapetan, dr.

On the significance of phage typing of staphylococci. Voj.san.pregl.  
18 no.6/7:559-563 Je-Jul '61.

1. Vojnomedicinska akademija u Beogradu, Higijenski zavod, Mikrobioloski  
institut.

(BACTERIOPHAGE) (STAPHYLOCOCCUS)

ARNERIC, Slavko, sanitetski potpukovnik, dr.; ZIVANOVIC, Olivera,  
sanitetski kapetan I kl., dr.

Role of Staphylococcus aureus in skin diseases and its relation  
to some antibiotics. Vojnosanit. pregl. 19 no.3:207-209 Mr '62.

1. Vojnomedicinska akademija u Beogradu, Klinika za kozne i  
polne bolesti, Higijenski zavod - Mikrobioloski institut.  
(ANTIBIOTICS) (DRUG RESISTANCE MICROBIAL)  
(STAPHYLOCOCCAL INFECTIONS) (DERMATITIS)  
(DERMATOLOGY)

S



ZIVANOVIC, Srboljub, asistent, dr.

Contribution to the study of the physical growth of boys and girls of secondary schools in Zemun according to the determination of Rohrer's index with the method of Gavrilovich. Glas. hig. inst. 10 no.1/2:55-59 Ja-Je '61.

1. Anatomski institut Medicinskog fakulteta u Beogradu Upravnik: Prof. dr Branko Sljivic.

(GROWTH)

ZIVANOVIC, Srboljub; LOLIC-DRAGANIC, Vera

Tuberculum interosseum radii and its ligaments. Med. pregl. 17  
no.7:365-369 '64

1. Zavod za anatomiju Medicinskog fakulteta u Novom Sadu  
(Upravnik: Prof. dr. Sinisa Radojevic).

ZIVANOVIC, Teodor, Sarajevo

On latent tuberculosis. Med. arh. 15 no.6:83-92 N-D '61.

(TUBERCULOSIS diag)

ZIVANOVIC, Toma, 1884-

VUKOVIC, Antonije, 1872- jt. au.

(Maintaining and improving the species) Sarajevo, Drzavna stamparija, 1932. 152 p.

(41-37010) QH431.Z47

YUGOSLAVIA / Chemical Technology. Chemical Products and  
Their Application. Pharmaceuticals. Vitamines.  
Antibiotics. H

Abs Jour: Ref Zhur-Khimiya, No 12, 1959, 43394.

Author : Vitorovic O., Velasevic K., Zivanovic D.

Inst : Not given.

Title : Effect of Supersonic Waves on the PVTD Type Dextran.

Orig Pub: Arkhiv farmats., 1958, 8, No 3, 183-187.

Abstract: Supersonic waves (SW) of 800 kcy/sec frequency and of 0.30 v/cm<sup>2</sup> intensity (I), in the course of 15 minutes cause dipolymerization and lowering of viscosity  $\eta$  of the 0.45% water solution of dextran (D) (1 hour after dissolving, 15 min., 6-12°); to cause a change of the 2.65% D solution I of 0.56 v/cm<sup>2</sup> is required. With the increase in I,  $\eta$  and molecular weight decrease proportionally. When I = 1.5 v/cm<sup>2</sup>,

Card 1/2

H-42

YUGOSLAVIA / Chemical Technology: Chemical Products and  
Their Application. Pharmaceuticals. Vitamins. H  
Antibiotics.  
Abs Jour: Ref Zhur-Khimiya, No 12, 1959, 43394.

Abstract:  $\eta$  are 0.181 and 0.205 instead of 0.253, and molecular weights are lowered by 46 and 32% for the 0.45 and 2.65% solutions of D. For the prolonged action of SW exceeding 10 minutes,  $\eta$  is proportionally lowered. In the action of SW (1.5 v/cm<sup>2</sup>, 15 min.) on the light fraction derived from D with the acid of CH<sub>3</sub>OH no changes were noticed. In the case involving a mixture of medium and heavy fractions, the depolymerization is observed. It is more pronounced for the heavy fraction ( $\eta$  varies from 0.304 and 0.361 up to 0.293 and 0.337, and molecular weight varies by 7 and 113% respectively). --  
I. Matveyeva.

Card 2/2

ZIVANOVIC, D.

Effect of supersonics on the germination of corn seed.

P. 81(Belgrade. Institut za fiziologiju razvica, genetiku i selkciju. ZBORNIK RADOVA.  
No. 4, 1956, Beograd, Yugoslavia)

Monthly Index of East European Accessions(EFAI) LC. Vol. 7,no. 2,  
February 1958

ZIVANOVIC, D

YUGOSLAVIA / Analytical Chemistry. Analysis of Inorganic Substances. E

Abs Jour: Ref Zhur-Khimiya, 1958, No 20, 67287.

Author : Zivanovic D., Maslov F.

Inst : ~~Not given.~~

Title : Determination of Tungsten in Ores.

Orig Pub: Tehn. pregl., 1956, 8, No 4, 84-86.

Abstract: A procedure for the determination of W in ores by a gravimetical method is described. A comparison of results obtained by gravimetical and photometrical methods on one of the Yugoslavian ores is given. 0.5-5.0 gr samples and heated in 100 cc of concentrated HCl on a sand bath until the total

Card 1/3



YUGOSLAVIA / Analytical Chemistry. Analysis of Inorganic Substances. E

Abs Jour: Ref Zhur-Khimiya, 1958, No 20, 67287.

Abstract: 5.

Abstract: volume of solution is reduced to approximately 40 cc, followed by the addition of 10cc of concentrated  $\text{HNO}_3$ , reduction of the volume by approximately 5cc, addition of approximately 200cc of water, 10 cc of cinchonine (I) (125 gr I in  $\text{HCl}$ , 1:1); the solution is then kept for 2 hours in a warm place and filtered. The precipitate is washed with a dilute solution of I, dissolved in 15cc of  $\text{NH}_4\text{OH}$  (1:2), allowed to stand for 10 minutes, and filtered. The resulting filtrate is heated (to remove excess  $\text{NH}_3$ ), diluted to 200cc with boiling water, followed by the addition of 3cc of concentrated  $\text{HCl}$  and 10cc of I solution, and kept for 2 hours warm. The precipitate, removed by filtration, is washed with the dilute solution of I, dried,

Card 2/3

YUGOSLAVIA / Analytical Chemistry. Analysis of Inorganic Substances. E

Abs Jour: Ref Zhur-Khimiya, 1958, No 20, 67287.

Abstract: calcined at  $750^{\circ}$ , and weighed as  $WO_3$ . For the photometrical determination of W, previously described method (Grimaldi F., North C., Ind. Eng. Chem., Anal. Ed., 1943, 15, 625) is used. It is based on fusing of a sample with  $Na_2O_2$ , dissolving it in water, adding  $NH_4SCN$  and  $SnCl_2$  (in the form of an acid solution), and subjecting the resulting solution to photometrical analysis while employing a violet filter S42E (Zeiss). Results of the gravimetric and photometric determinations coincided and were within the limits of normal analytical errors.

Card 3/3

*Zivanovic, D.*

Yugoslavia/Analytical Chemistry - Analysis of Inorganic Substances, G-2

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 1261

Author: Zivanovic, D.

Institution: None

Title: Application of Photometry in Flotation During the Wet Separation of the Ores and in the Determination of Noble Metals

Original

Periodical: Technika, 1956, Vol 11, No 7, 1010-1017 (published in Croat with a summary in German)

Abstract: The photometric technique is applied to the determination of Cu in rocks, ores, and flotation concentrates; the method is based on the dissolution of the sample in a mixture of  $H_2SO_4$  and  $HNO_3$ , evaporation to dryness, dissolution of the residue in water, and addition of ammonia. The photometric determination is carried out with a wavelength of 7,200 A. Lead is determined photometrically with a wavelength of 4,200 A, with the addition of  $Na_2S$  in the presence of an acetate buffer with pH 4.6 and of gelatin solution. For the

Card 1/2

Yugoslavia/Analytical Chemistry - Analysis of Inorganic Substances, G-2

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 1261

Abstract: determination of W in ores the metal is first converted to  $\text{Na}_2\text{WO}_4$  and the photometric determination is carried out at 4,200 A after addition of  $\text{NH}_4\text{SCN}$  and  $\text{SnCl}_2$ .

Card 2/2

ZIVANOVIC, DUSAN

Yugoslavia/Analytical Chemistry. General Topics.

G-1

Abs Jour : Referat. Zhurnal Khimiya, No 6, 1957, 19509.

Author : Dusan Zivanovic.

Inst : -

Title : Application of Photometry to Industrial Checking.

Orig Pub : Tehnika, 1956, 11, No 10, 1521-1526.

Abstract : The part of photometric methods of industrial checking, especially in the metallurgical industry, and the advantages of these methods as compared with chemical methods were discussed. The usefulness of photometric methods of analyses of usual and small size samples was shown, the checking of the quantometer was described and examples of using photometric methods in various regions were cited. It is recommended to determine Cu in the form of the tetramine complex  $\text{Cu}(\text{NH}_3)_4^{2+}$ , Pb in the form of PbS sol, Zn in the form of a complex with SCN- and methyl violet, Cr in the form of  $\text{CrO}_4^{2-}$ , Au in the form of  $\text{Au}^0$ , and  $\text{Pt}^{2+}$  by the

Card 1/2

-23-

Yugoslavia/Analytical Chemistry. General Topics.

G-/

Abs Jour : Referat. Zhurnal Khimiya, No 6, 1957, 1959.

coloration of molybdenum blue. The above methods  
are applicable in particular for checking the pro-  
cesses of flotation and wet methods of concentration.

Card 2/2

-24-

ZIVANOVIC, D.; MASLOV, T.

ZIVANOVIC, D.; MASLOV, T. Contribution to determining wolframite resources. p. 84.

Vol. 8, No. 4, 1956.

TEHNIČKI PRIGLED

TECHNOLOGY

Zagreb, Yugoslavia

So: East European Accession, Vol. 6, No. 2, Feb. 1957

ZIVANOVIC, D.

Use of photometry in flotation, in wet separation of ores, and in analysis of precious metals. p.10101 TEHNIKA (Savaz inzenjera i techicara Jugoslavijs) Beograd. Vol. 11, no. 7, 1956.

SOURCE: East Europe Accession Lists (EEAL),  
Library of Congress, Vol. 5, no. 11, Nov. 1956



ZIVANOVIC, D.

"Effect of Sound Waves on the Multiplication of the *Paramecium*" p. 185  
(ZBORNIK RADOVA, Vol. 25, no. 2, 1952, Beograd, Yugoslavia)

SO: Monthly List of East European Accessions, Library of Congress, Vol. 2,  
No. 10, October, 1953, Unclassified

YUGOSLAVIA/Analytic Chemistry. Analysis of Inorganic Substances.

Abs Jour: Ref Zhur-Khin., No 23, 1958, 77338.

Author : Zivanovich Dusan.

Inst :

Title : Application of Potentiometric Method to Titrimetric Determination of Percentual Iron Content in Iron Ores and of Manganese Content in Ferromanganese and Manganese-Silicon.

Orig Pub: Tehnika, 1958, 13, No 2, Hem. ind., 12, No 2, 22-26.

Abstract: In the determination of Fe, 0.5 g of the rock to be analyzed is dissolved in the mixture of 30 ml of HCl (1 : 1), 30 ml of HNO<sub>3</sub> (1 : 1) and 15 ml of H<sub>2</sub>SO<sub>4</sub> (1 : 1), the solution is evaporated until fumes of SO<sub>3</sub> appear, diluted with water and filtered.

Card : 1/3

YUGOSLAVIA/Analytic Chemistry. Analysis of Inorganic Substances.

E

Abs Jour: Ref Zhur-Khin., No 23, 1958, 77338.

The insoluble residue is burnt with the filter, evaporated with 1 ml of 40%-ual HF and 1 or 2 drops of concentrated  $H_2SO_4$  until dry, and fused with  $K_2S_2O_7$ . The fuse is dissolved in dilute  $H_2SO_4$  and the solution is combined with the original filtrate. The prepared solution (solution A) is evaporated to about 100 ml, heated with 5 ml of concentrated HCl to the boiling point, and  $SnCl_2$  is added in a little excess (1 to 2 drops) for the reduction of  $Fe^{3+}$ ; 100 to 200 ml of water, 10 ml of  $HgCl_2$  solution, 50 ml of mixed  $H_2SO_4$  and  $H_3PO_4$  (150 ml of  $H_2SO_4$ , 100 ml of  $H_3PO_4$  and 750 ml of water mixed together), and 12 drops of 1%-ual diphenylamine solution in concentrated

Card : 2/3

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YUGOSLAVIA/Analytic Chemistry. Analysis of Inorganic Substances.

E

Abs Jour: Ref Zhur-Khin., No 23, 1958, 77338.

$H_2SO_4$  are added, and the mixture is titrated potentiometrically with 0.1 n.  $K_2Cr_2O_7$  solution. For Mn determination, the analysis is started in the same way up to the preparation of the solution A, which is diluted with water to 250 ml after that. 25 g or more of solid  $Na_2P_2O_7 \cdot H_2O$  and up to about 300 ml of water are added to 25 ml of the dilute solution, pH is adjusted on the level of 6 to 6.5 with  $H_2SO_4$ , and it is titrated with 0.02 n.  $KMnO_4$  solution. Both the methods give reproducible results. - N. Turkevich.

Card : 3/3

CA

7

Determination of zinc by the ferrocyanide method.  
D. Živanović (Rudnik "Trepcan," Zvečan, Yugoslavia).  
*Bull. Acad. Sci. Ser. B, Chem. Appl.* 19, 91-100 (1974) (English sum-  
mary); cf. Low, *Technical methods of ore analysis*, 1927,  
p. 293 (C.A. 21, 571); Hastings, *Eng. Mining J. Pract.*,  
121, 247-48 (1925).—Details are given for detg. Zn in metal-  
lurgical products and in ores. 25 references. S. B. B.

BC

99

222. Microanalysis method for determination of iron (in steel).  
D. Zimanyi: Metall. Sci. Abstr. 1969, 18, 61-100. (1969).  
Sample (0.5 g.) containing 0.2% of Fe is evaporated with dil.  
(1:1)  $HNO_3$  to dryness 5 g. of the perchlorate, a little water, and 10  
drops of 10%  $HCl$  are added, and the whole is boiled for a few min.  
without stirring; then Fe is pptd. with aq.  $NH_4OH$ , the liquid  
filtered, and the ppt. washed 3 times with 4% aq.  $(NH_4)_2CO_3$   
(not  $NH_4Cl$ , as in this case Co cannot be pptd. with  $K_2CrO_4$ ).  
The filtrate is boiled to remove most of the  $NH_3$ , and Co is pptd.  
with 10 ml. of 10% aq.  $NH_4SCN$ . Without removing the ppt., 5 ml.  
of dil. (1:1)  $HCl$  are added and the liquid is titrated with aq.  
 $K_2Fe(CN)_6$  using  $NH_4Cl$  methylate as external indicator.  
S. S. Mikoski6.

ASSOCIATE METALLURGICAL LITERATURE CLASSIFICATION

RESEARCH DIVISION

SEARCHED

SERIALS

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

CA

7

**Electrolytic determination of cadmium.** Duban Zergovsk.  
*Prilozheniye 14, 221-46/1940* (English summary). *Dokl. Ak. Nauk  
 SSSR* 14, 221-46/1940 (English summary). — The determination of Cd in different morphological products of Zn and Pb is described. Dissolve 5 g. Zn concentrate in 15 ml. 6 N HCl and 15 ml. concd. HNO<sub>3</sub>. Boil the soln. to a small vol., treat with 15 ml. 18 N H<sub>2</sub>SO<sub>4</sub> and heat. Treat the nearly dry residue with 100 ml. of hot H<sub>2</sub>O, add 15 ml. of 10% Na<sub>2</sub>SO<sub>4</sub>, boil the mixt. for a few min., filter, wash the ppt. with 40 ml. H<sub>2</sub>O. Treat the hot filtrate with 1 ml. of 30% H<sub>2</sub>O<sub>2</sub>, 12 ml. of concd. Ni(OH)<sub>2</sub>, and 5 g. K<sub>2</sub>SO<sub>4</sub> (or (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>) to ppt. Mn, boil the mixt. a few min., slightly cool and treat with a little 30% H<sub>2</sub>O<sub>2</sub>. Add the supernatant obtained to 10 ml. concd. Ni(OH)<sub>2</sub> to ppt. Mn, filter hot, and wash with hot 4% (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> soln. Heat the filtrate to drive off Ni(OH)<sub>2</sub> and H<sub>2</sub>O, dil. to 250 ml., neutralize with dil. H<sub>2</sub>SO<sub>4</sub> (methyl red) and acidify with 1 drop of 18 N H<sub>2</sub>SO<sub>4</sub>. Add 0.5-1 ml. of 0.1% soln. of pure gelatin and 5 g. H<sub>2</sub>BO<sub>3</sub>. Electrolyze the soln. at 50° for 0.5 hr. by using Pt anode and a 6 x 150 mm. Zn rod as cathode. Immerse the electrodes in warm H<sub>2</sub>O containing a few crystals of H<sub>2</sub>BO<sub>3</sub> and disconnect. Use 50% Pt(OH) to wash the cathode. The washings and the electrolyte should give no test for Cd. When the Zn concentrate contains a large amt. of Cu, effect the pptn. of Mn and Fe in a 250-ml. volumetric flask with 50 ml. concd. Ni(OH)<sub>2</sub>, adjust the vol. and take a 200-ml. aliquot for further work. The amt. of Cd absorbed by Pt(OH)<sub>2</sub> is noted in a control run by using a standard Cd soln. to which was added an amt. of Fe approx. equal to that in the analyzed sample, and the result of the analysis corrected accordingly. In the analysis of bismuthous dust (I) it is necessary to remove PbSO<sub>4</sub> before Cu is pptd. with Na<sub>2</sub>SO<sub>4</sub>. For the analysis of Cd concentrates (II) a 0.1-0.2 g. sample is used. Since I and II contain more As than Fe, a 10-fold excess of CuSO<sub>4</sub>·5H<sub>2</sub>O over As is added after the evapn. of H<sub>2</sub>SO<sub>4</sub>, and more Na<sub>2</sub>SO<sub>4</sub> is used. S. E. B.

ZIVANOVIC, Miodrag D.; KONSTANTINOVIC, Jovan M.; JOVIC, Djordje M.  
[Jovic, Dorde M.]

Growing large monocrystals of lead, Bul Inst Nucl 10:43-46 Mr '60.  
(EPAI 10:5)

1. Institute of Nuclear Sciences "Boris Kidrich" Laboratory of  
Physics.

(Lead) (Crystals)



ZIVANOVIC, Olivera, dr., sanitetski major; UZELAC, Ozren, sanitetski puk.  
doc.; ILIC, Pavle, sanitetski kapetan, dr.; SEHTIC, Anica, sanitetski  
major, dr. Tehnicki saradnici: MILIC, Mirjana, ASENTEJJEVIC, Vida

Incidence and phagotypes of Staphylococ us pyogenes in turns  
and vicinity. Vojnosanit. pregl. 21 no.12:765-770 D'64.

1. Klinika za plasticku hirurgiju, Mikrobioloski institut, Vojno-  
medicinska akademija u Beogradu.

ZIVANOVIC, Olivera, sanitetski kapetan I klase d-r

In vitro antibiotic sensitivity of gram-negative bacilli isolated in urinary infections. Voj.san.pregl., Beogr. 17 no.7/8:800-804 J1-Ag '60.

1. Vojnomedicinska Akademija u Beogradu, Higijenski zavod, Mikrobioloski institut

(URINARY TRACT INFECTIONS etiol)

(ANTIBIOTICS pharmacol)

LIVANOVA E.

- [illegible]

**Belgrade, Notes International, Vol 31, No 2, 1953 (continued)**

Tuesday, Baltimore pp 72-80,

12. Interpretation and Clarification of Items 4 to 6 above should be given by the Secretary and Committee. Personnel present at the meeting on 11/27/73

**L'Onorevole** si è recato al Parlamento per discutere la legge sulla riforma dell'amministrazione pubblica, e ha parlato con molta efficacia.

③

ZIVANOVIC, S

from 4 to 6-10%.

N. FLYNN.

99

ZIVANOVIC, S.

Possibility of production of zeolite in our country.  
p. 1425. Vol. 9, No. 9, 1954. TEHNIKA. Beograd,  
Yugoslavia.

SOURCE: East European Accessions List, (EEAL) Library  
of Congress, Vol. 5, No. 8, August, 1956.

ZIVANOVIC, S.

Variation of the new standard-gauge track on the Sarajevo-Mostar-Luka  
Ploce line; a combination of railroad tracks for the high dam across the  
Neretva River above Konjic. p. 201.  
ZELEZNICE. Beograd.  
Vol. 11, no. 6, June 1955

SOURCE: East European Accessions List (EEAL), LC, Vol. 5, no. 2,  
Feb. 1956

ZIVANOVIC, S.

"The Belgrade railway junctions." p. 37. (ZELEZNICE, Vol. 9, no. 2, Feb. 1953, Beograd.)

30: Monthly List of East European Accessions, Vol. 2, #8, Library of Congress  
August, 1953, Uncl.



Distr: 4E2c/4E3b

Enrichment of low- and high-carbon graphites of Pakrac by flotation. *Summary of Yugoslav Technol. Inst. JNA, 1-11-77 (WK)*  
 Belgrade, Yugoslavia and Franja Sijavec. *Technika*  
 (Belgrade) 14, 1748-51(1979).—In the flotation of low and high C graphites of Pakrac (Crestin), contg. <0.50% C, high yields required fine grinding, which was satisfactory when 85-90% of the charge passed a 0.06-mm. sieve. Pine oil and gas oil were best as foaming agent and collector, resp. Alk. pulps of pH 8-9 were superior to neutral or slightly acidic ones. The high-C content varieties examined by x-rays showed a clear cryptocryst. structure. They have good properties for foundry application. N. Plavšić

ZIVANOVIC, Svetislav B., ing.; RIJAVEC, Frana, hemicar; HAJDUKOVIC,  
Joz

The development of the exploitation and refining of the graphite  
of Pakrac. Kem ind 10 no.5:137-141 My '61.

1. Savetnik, UVTI, Beograd (for Zivanovic). 2. Saradnik Instituta  
za ispitivanje materijala NRS, Beograd (for Rijavec). 3. Tehnicki  
rukovodilac Slavonskih rudnika nemetala, Pakrac (for Hajdukovic).

ZIVANOVIC, Todor, Dr., (Sarajevo)

Auditive and visual method in lung examination. Med. arh.,  
Sarajevo-9 no.1:73-83 Jan-Feb 55.

(LUNGS, radiography  
diag. value, comparison with percussion & auscultation.  
(Ser))

(PERCUSSION,  
lungs, value in comparison with auscultation &  
radiography. (Ser))

(AUSCULTATION,  
lungs, value in comparison with percussion &  
radiography. (Ser))

ZIVANOVIC, Teodor, Dr., Sarajevo

Auditive and visual method in heart examination. Med. arch.,  
Sarajevo 9 no.4:169-186 July-Aug 55.

(HEART, radiography  
comparison with percussion & auscultation in heart  
exam. (Ser))

(PERCUSSION,  
heart, comparison with auscultation & radiography in  
heart exam. (Ser))

(AUSCULTATION,  
heart, comparison with percussion & radiography in  
heart exam. (Ser))